UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

BUFFALO PATENTS, LLC,)	
Plaintiff,)	
v.)	22-cv-62]
MOTOROLA MOBILITY LLC,)	
Defendant.)	

MEMORANDUM OPINION

CHARLES P. KOCORAS, District Judge:

Before the Court is Defendant Motorola Mobility LLC's ("Motorola") motion for partial judgment on the pleadings pursuant to Federal Rule of Civil Procedure 12(c). Dkt. # 33. For the following reasons, the Court denies the motion.

BACKGROUND

On February 4, 2022, Plaintiff Buffalo Patents, LLC ("Buffalo") filed its complaint alleging Motorola infringes five patents: (1) U.S. Patent No. 7,187,670 ("'670 Patent") (Count I); (2) U.S. Patent No. 7,408,915 ("'915 Patent") (Count II); (3) U.S. Patent No. 8,611,328 ("'328 Patent") (Count III); (4) U.S. Patent No. 9,001,816 ("'816 Patent") (Count IV); and (5) U.S. Patent No. 6,858,086 ("'086 Patent") (Count V). Dkt. # 1. Motorola answered the complaint on May 5, 2022, Dkt. # 25, and filed the instant motion for partial judgment on the pleadings on June 8, 2022, Dkt. # 33. Motorola seeks judgment in its favor on Counts I–IV, arguing that the '670 Patent, '915

Patent, '328 Patent, and '816 Patent ("Challenged Patents") are patent-ineligible under 35 U.S.C. § 101.

The following background is based on the pleadings, "documents incorporated by reference to the pleadings," and matters that are the subject of judicial notice. *See Milwaukee Police Ass'n v. Flynn*, 863 F.3d 636, 640 (7th Cir. 2017) (citation omitted). For purposes of this motion, we accept all well-pleaded allegations from the complaint as true and draw all reasonable inferences in Buffalo's favor. *See St. John v. Cach*, *LLC*, 822 F.3d 388, 389 (7th Cir. 2016).

The '670 Patent is the parent of the other three Challenged Patents, and all four Challenged Patents share a nearly identical specification. The Challenged Patents "relate[] to an electronic portable communications terminal for Internet/network telephony," Dkt. # 1-1, at 1:5–6, i.e., they relate to improving internet or wireless network telephony using mobile devices. The Challenged Patents disclose methods and systems for formatting and transmitting audio signals/voice information to an end user over a wireless network, in a digital format based on a network protocol (e.g., Wi-Fi, IEEE 802.11). In other words, the Challenged Patents describe a portable communications terminal that uses the Internet to make and receive phone calls in any location where there is Internet/network access. *Id.* at 3:63–65. The specification summarizes the invention:

A communication terminal for Internet telephony is provided that handles and control[s] communication of data in accordance with a standardized network protocol and exchanges data with a connecting unit connected to

the Internet where the resulting data exchanged between the terminal and a connecting unit consist of packets in a standardized protocol data packet format embedded in a wireless format. This provides a communications terminal which uses a network or the Internet for the transfer of digitized speech, etc., thereby achieving great economic savings. Also, the flexibility is increased with respect to wireless communication with the network or the Internet without any need for specialized equipment and functionality.

Id., Abstract.

This technology is used in smartphones and other devices for "Voice over Wi-Fi" calling ("VO-WiFi"). Dkt. # 1, \P 9. It allows a user to place a call over private networks, home Wi-Fi networks, and public Wi-Fi hotspots. The Challenged Patents describe the VO-WiFi technology as a low-cost alternative to ordinary telephone systems, especially over long distances. "Such systems convert the speech information into and from a suitable digital format, which is divided into data packets that are transported via the Internet itself, the actual transport via the Internet being typically at a fixed price." *Id.* at 1:13–18.

Although internet telephony existed before the Challenged Patents, that technology suffered from certain practical problems. These included a "dual-mode device" that connected to a network via a cable, which was "troublesome" because the cable "restrict[ed] the movement of the user when the dual-mode device is being used and requires for special equipment at the connecting point" and the device was "of a complicated and more expensive design with a relative[ly] large power usage." *Id.* at 1:33–47. In another example, radio frequency ("RF") technology utilized a "base

station" and a terminal connected to the base station, which presented problems because "a terminal associated with a given base station cannot readily be used in connection with another base station," and it was "a great obstacle to the flexibility with respect to mobility and updating/expansion of functionality, since the specialized equipment must be physically present at every single location where the terminals are contemplated for use." *Id.* at 1:64–2:20.

The Challenged Patents sought to address issues in the prior art by, for example, "provid[ing] a communications terminal which increases the flexibility with respect to wireless communication/connection with a network and/or the Internet," "provid[ing] a communications terminal which does not need specialized equipment and functionality to provide a connection to a network and/or the Internet," "enabl[ing] flexibility with respect to functionality," and "provid[ing] a communications terminal enabling a relative simple design, small size, and relative low/reduced power consumption." *Id.* at 2:45–61. To do so, they disclosed a "communications terminal" that "establishes a wireless connection to a connecting unit" that is connected to the internet. *Id.* at 3:36–38.

The portable communications terminal offers a "considerable economic advantage." *Id.* at 3:33–35. It foregoes the specialized equipment of the prior art in favor of "simplified standardized equipment, which must merely be capable of establishing a connection to a given network and/or the Internet." *Id.* at 3:42–45. The communications terminal "can independently control and communicate data packets

according to a standardized Internet/network protocol" and the wireless connection is "just used for transferring the data packets to the connecting unit in an expedient manner." *Id.* at 3:39–47. Therefore, Internet telephony can be achieved if the communications terminal "is just in the vicinity of standardized equipment allowing the set-up of a network and/or Internet connection." *Id.* at 3:48–51; *see also id.* at 3:63–65 ("A user would be capable of receiving and transmitting a call regardless of the specific location as long as there is Internet/network access."). And "since only communication means for near field communication needs to be present, . . . a relative low complexity and power consumption is obtained and a relatively small size of the terminal is made possible thereby making [it] very suitable for wearing and/or carrying by a user." *Id.* at 4:6–12.

Motorola cites the following claims from each of the Challenged Patents as "exemplary":

'328 Patent, Claim 8

A method comprising:

converting a first signal representing detected sound to first digital data;

converting the first digital data into one or more first data packets that accord to a network protocol of a first network;

¹ Motorola asserts the Court can review these "representative" claims because they are "substantially similar and linked to the same abstract idea." Dkt. # 33, at 6 (citation omitted). Buffalo counters that "Motorola does not come close to meeting its burden" to show that its "Section 101 defense is well taken as to each claim." Dkt. # 47, at 18 (citation omitted). In short, they argue the claims cited by Motorola are not representative—some of them are not even asserted in this case. Because, as explained *infra*, we deny Motorola's motion regardless, we do not reach the "representative claims" question.

embedding the one or more first data packets into first wireless data that accords to a network protocol of a near field communication network; and

transmitting the first wireless data via the near field communication network in accordance with the network protocol of the second network.

'328 Patent, at 13:19–30.

'816 Patent, Claim 1

An apparatus comprising:

a wireless component configured to receive, via a near field network, wireless data that is formatted according to a first network protocol, wherein the wireless data comprises a data packet formatted according to a second network protocol, and wherein the wireless unit is further configured to extract the data packet from the wireless data; and

an audio component configured to generate a sound based on the data packet.

'816 Patent, at 12:52-61.

'670 Patent, Claim 13

A method for network telephony comprising the steps of:

reproducing sound on the basis of a first electrical signal and recording sound resulting in a second electrical signal, by audio means,

converting said second electrical signal into transmission data, representing sound for transmission, in a suitable data format, and converting received data, representing received sound, in said suitable data format into said first electrical signal, by converting means, and

handling/controlling communication of said received and transmission data in accordance with a standardized network protocol and embedding and extracting said transmission and received data, respectively, in/from a first data packet format according to said standardized network protocol, by protocol means,

receiving/sending, by wireless near field communication means, of said received data or said transmission data in said first data packet format from/to said protocol means, embedding said transmission data in said first data format received from said protocol means in a wireless second data format and extracting said received data in said first data format from said wireless second format,

communicating, by said wireless near field communication means of said received data or said transmission data embedded in said wireless second data format with a connecting unit communicating in said wireless second data format and to establish a connection to a network according to said standardized network protocol, whereby the resulting data exchange between the wireless near field communication means and the connecting unit consist of packets in said first data packet format embedded in said wireless second data format.

'670 Patent, at 15:35–16:2 (emphasis added).

'915 Patent, Claim 17

A system for network telephony, the system comprising:

a portable communications terminal comprising:

protocol means handing and controlling communication of received and transmission data in accordance with a standardized network protocol, thereby embedding and extracting said transmission and received data, respectively, in/from a data packet format according to said standardized network protocol, and

wireless near field communications means connected to said protocol means and receiving/sending said received and transmission data in said data packet format from/to said protocol means, the wireless near field communications means embedding said transmission data in said data packet format received from said protocol means in a WiFi or IEEE 802.11 format and to extract said received data in said data packet format from said WiFi or IEEE 802.11 format, the wireless near field communications means performing wireless near field communication of said received data or said transmission data embedded in said WiFi or IEEE 802.11 format with a connecting unit communicating in said WiFi

or IEEE 802.11 format and to establish a connection to a network according to said standardized network protocol, whereby the resulting data exchanged between the wireless near field communication means the connecting unit include packets in said data packet format embedded in said WiFi or IEEE 802.11 format,

a connecting unit connected to the wireless near field communications means communicating in a WiFi or IEEE 802.11 format, the connecting unit establishing a connection to a network,

a service served connected to a network, said server comprising one or more databases comprising information related to potential desired communication receivers or transmitters, said server being passing on information concerning an IP address of a desired communication receiver and establishing a direct connection between the desired communication receiver and a communication transmitter, wherein said terminal is acting as a communication transmitter or as a communication receiver within the system.

'915 Patent, at 14:28–15:3.

LEGAL STANDARD

Rule 12(c) permits a party to move for judgment on the pleadings after both the plaintiff's complaint and the defendant's answer have been filed. Fed. R. Civ. P. 12(c). Rule 12(c) motions are reviewed under the same standard as Rule 12(b)(6) motions to dismiss. *Pisciotta v. Old Nat'l Bancorp*, 499 F.3d 629, 633 (7th Cir. 2007). The Court only considers the complaint, the answer, any attached written instruments referred to in the complaint, and any information subject to judicial notice. *Winner v. Rauner*, 2016 WL 7374258 (N.D. Ill 2016). We accept all well-pleaded allegations in the complaint as true and draw all reasonable inferences in the plaintiff's favor. *St. John*, 822 F.3d at 389. To succeed on a motion for judgment on the pleadings, the moving

party "must demonstrate that there are no material issues of fact to be resolved." *N. Ind. Gun & Outdoor Shows, Inc. v. City of S. Bend*, 163 F.3d 449, 452 (7th Cir. 1998). This standard is demanding and requires a showing "beyond doubt" that the nonmovant cannot prove any facts that support its claim for relief. *Id.*

DISCUSSION

Section 101 of the Patent Act broadly defines the scope of patentable subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any improvement thereof." 35 U.S.C. § 101. However, claims directed toward laws of nature, natural phenomena, and abstract ideas are not patent eligible ("the exclusionary principle"). *Alice Corp. Pty. Ltd. v. CLS Bank Int'l,* 573 U.S. 208, 216 (2014). That said, "an invention is not rendered ineligible for patent simply because it *involves* an abstract concept." *Id.* at 217. And the exclusionary principle does not bar patents that claim "applications of those concepts." *Id.*

To determine whether a patent is barred by the exclusionary principle, courts follow a two-step analysis. *Id.* The first step is to "determine whether the claims at issue are directed to . . . patent-ineligible concepts." *Id.* If the claims are directed to a patent-ineligible concept, the second step is to determine whether the claim limitations, analyzed individually and as ordered combinations, contain an inventive concept that transforms the claims into patent-eligible subject matter. *Id.*

Patent eligibility can sometimes be determined at the pleadings stage, but "only when there are no factual allegations that, taken as true, prevent resolving the eligibility

question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). If there are claim construction disputes, the court must proceed by either adopting the non-moving party's constructions "or the court must resolve the disputes to whatever extent is needed to conduct the [Section 101] analysis, which may well be less than a full, formal claim construction." *Id*.

While the ultimate determination of eligibility under Section 101 is a question of law, that determination turns on whether the claim elements or the claimed combinations are well-understood, routine, and conventional, which is a question of fact. *Id.* at 1128. The Federal Circuit has held that patentees who adequately allege their claims contain inventive concepts sufficient to "transform" the claimed abstract idea into a patent-eligible application survive a Section 101 eligibility analysis under Rule 12(b)(6). *Id.* at 1126–27.

Motorola urges the Court to dismiss Counts I–IV because the Challenged Patents claim patent-ineligible subject matter and are thus invalid under Section 101. Motorola asserts that the Challenged Patents cannot pass the two-part patent eligibility test set forth in *Alice* and are therefore invalid as a matter of law because: (1) the claims are directed to the abstract idea of "packaging audio data into a first data packet having a first standardized transmission format" and then "packaging the first data packet into a second data packet having a second standardized transmission format"; and (2) the claims do not recite an inventive concept. Dkt. # 33, at 10, 14.

To uncover whether a claim is directed to an abstract idea, one must "identify the purposes of the claim – in other words, determine what the claimed invention is trying to achieve – and ask whether that purpose is abstract." *Enfish, LLC v. Microsoft Corp.*, 56 F. Supp. 3d 1167, 1173 (C.D. Cal. 2014), *aff'd*, 822 F.3d 1327, 1335 (Fed. Cir. 2017). "[T]he claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Two-Way Media Ltd. v. Comcast Cable Commc'ns., LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017) (quotation omitted). Courts "look to whether the claims in the patent focus on a specific means or method, or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery." *Id.* (citation omitted).

Claims directed to generalized steps to be performed on a computer using conventional computer activity are not patent-eligible. *Id.* (citation omitted). But claims "purporting to improve the functioning of the computer itself, or improving an existing technological process might not succumb to the abstract idea exception." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2017) (cleaned up). It is "relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea," and courts ask "whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Id.* at 1335–36.

Here, drawing all inferences in Buffalo's favor, Motorola has not demonstrate that the Challenged Patents are directed to an abstract idea. We determine that, assessing the character of the claims "as a whole", the Challenged Patents do focus on a specific means or method for Internet telephony. *See Two-Way*, 874 F.3d at 1337. Furthermore, the patents purport to "improv[e] an existing technological process" and focus "on the specific asserted improvement in computer capabilities." *See Enfish*, 822 F.3d at 1335. The "directed to' analysis . . . depends on an accurate characterization of what the claims require and of what the patent asserts to be the claimed advance." *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1294 (Fed. Cir. 2020). While Motorola argues that the claims of the Challenged Patents are directed to the abstract idea of packaging data packets, that "disregard[s] elements of the claims at issue that the specification makes clear are important parts of the claimed advance in the combination of elements." *See id*.

The Challenged Patents' specification details problems with the prior art, e.g., a connection cable that restricted movement, a complicated and expensive device with relatively large power usage, and a base station connected only to a specific communications terminal with a lack of flexibility and mobility since "the specialized equipment must be physically present at every single location where the terminals are contemplated for use." '670 Patent, at 1:64–2:20. It also highlights how the Challenged Patents addressed those problems by, e.g., providing a communications terminal that does not require specialized equipment, enabling flexibility for functionality, and

providing a simpler designer, small size, and relatively low/reduced power consumption. To accomplish this, the Challenged Patents disclose a portable communications terminal that establishes a wireless connection to a connecting unit connected to the internet. The terminal offers a "considerable economic advantage" by using "simplified standard equipment" which only needs network/internet connection capability. Because the terminal "can independently control and communicate data packets according to a standardized Internet/network protocol," the wireless connection is "just used for transferring the data packets to the connecting unit in an expedient The terminal need only be near standard internet/network connection manner." equipment to achieve internet telephony. And because "only communication means for near field communication needs to be present," the terminal can be simpler, with low power consumption, and a small size. In other words, using the invention of the Challenged Patents a person can make a phone call over the internet using, e.g., a portable cell phone with internet capability and an everyday wireless internet router, as opposed to, e.g., using a device with a cable or using a radio system requiring a specific base station that only works with specific radio devices.

Even if, as Motorola asserts, the claims only disclose well-known practices and techniques, the "specification makes clear" that the unconventional combination of these elements allows for the "claimed advance." *See TecSec*, 978 F.3d at 1294. The Challenged Patents combine elements related to converting data from one form to another and packaging that data for transmission with the use of a wireless near-field

connection to a connecting unit to establish voice communication over the internet. In sum, the Challenged Patents are directed to the unconventional use of the claimed elements which achieves technological improvements in internet telephony. They are not merely directed to the alleged "abstract idea" of packaging data packets.

Other courts have found that patents were not directed to an abstract idea in similar circumstances where the claimed invention is alleged to have improved upon existing technology. See, e.g., Uniloc USA, Inc. v. LG Elecs. USA, Inc., 957 F.3d 1303, 1307 (Fed. Cir. 2020) (patents directed to solving technological problems with mobile communications and networking systems were not directed to abstract idea because claims did not merely recite generalized steps to be performed on a computer using conventional computer activity but rather made a specific improvement to the functionality itself); SRI Int'l, Inc. v. Cisco Sys., Inc., 930 F.3d 1295, 1300-01 (Fed. Cir. 2019) (computer network patents not directed to abstract idea when they improved the technical functioning of the computer and computer networks and were not directed to automating a conventional idea on a computer); *Enfish*, 822 F.3d at 1337–38 (patents that improved the way a computer stores and retrieves data in memory were not directed to an abstract idea); Mentone Sols. LLC v. DIGI Int'l Inc., No. 2021-1202, slip op. at 9 (Fed. Cir. 2021) (claims improved the normal operation of the communication system itself to overcome a problem specifically arising in the realm of computer networks).

Motorola's arguments against patent eligibility are not persuasive. The focus of Motorola's opening brief is that the Challenged Patents are directed to the abstract idea

of packaging data packets and that the claims contain "nothing more than the known practices of collecting, processing, converting, and transmitting data, which courts have repeatedly found ineligible." Dkt. #33, at 10. But as discussed above, we find that, viewing the Challenged Patents as a whole, they are not directed to the data packet packaging process, but rather to the combination of elements which achieves technological advances in internet telephony. Describing the patents as only claiming "collecting, processing, converting, and transmitting" is an impermissible "high level of abstraction" that "overgeneraliz[es] the claim." See TecSec, 978 F.3d at 1294 (quoting *Enfish*, 822 F.3d at 1337). And it completely ignores the specification, which makes clear that the Challenged Patents' claimed advance is the specific technological improvements over the prior art. See TecSec, 978 F.3d at 1294 ("To arrive at [defendant's mischaracterization of the claims], [defendant] had to disregard elements of the claims at issue that the specification makes clear are important parts of the claimed advance in the combination of elements."); Kove IO, Inc. v. Amazon Web Servs., 448 F. Supp. 3d 849, 861 (N.D. Ill. 2020) ("Defendant's suggested rewrite ignores the patents' specifications, which make clear that the invention is aimed at improving computer network storage.").

While Motorola acknowledges the issues with the prior art that the Challenged Patents purport to solve, it criticizes them for not requiring any specialized method or component to address that problem, and only reciting "wireless communication means" described as RF protocol, Bluetooth protocol, infrared protocol, "or another wireless

protocol." Dkt. # 33, at 12 ("the specification asserts a wireless cellular connection between a terminal (mobile device) and a base station to transmit the audio data over IP protocol may be disadvantageous because it 'requires a greater power source adding to the minimum size of a device with a useful time-span between re-charge[.]""). But the very benefit of the claimed invention is that it can utilize non-specialized, generic internet connection methods. *See Northwestern v. Kuka*, 2021 WL 4711538, at *5 (N.D. Ill. 2021) ("Because the benefit of the invention is its modularity, versatility, and adaptability, requiring [plaintiff] to allege the invention's configuration, programming, and componentry at such a high level of specificity would be difficult—if not impossible.").

Motorola argues in its reply brief that that Challenged Patents did not achieve the improvement they purported to achieve—eliminating specialized equipment—because "such specialized equipment is still needed" in the form of the "connecting unit." Dkt. # 50, at 2, 5. But Motorola fails to show that the specialized "base station" criticized in the specification is equal to the claimed "connecting unit." Rather, it seems they are quite different. The Challenged Patents describe specialized base stations in the context of RF technology that were associated with specific terminals and had to be "physically present at every single location where the terminals are contemplated for use." '670 Patent, at 1:64–2:20. In contrast, the claimed connecting unit can be "standardized equipment" that connects to the internet and is not associated only with specific devices. Just because both connect to the internet does not make them the

same. The point is that a connecting unit, although still needed for internet connection, is *not* specialized, i.e., it is an everyday item. Rather than go out and buy a special RF base station, one can conduct internet telephony over the type of general network/internet device already found in many homes, public spaces, and places of business. Motorola's assertions equating a "base station" to the "connecting unit" are simply at odds with the language of the Challenged Patents. *See* Dkt. # 50, at 4–6.

In sum, the Court declines to find that the Challenged Patents are directed to an abstract idea. We therefore do not need to reach step two of the *Alice* analysis. But we note that even if the Challenged Patents were directed to an abstract idea, at the very least there are factual disputes regarding whether the patents contain an inventive concept which would preclude granting Motorola's motion.

Patent eligibility can be determined on the pleadings under Rule 12(c) only if there are no factual allegations that, taken as true, preclude resolving the question of eligibility as a matter of law. *Aatrix*, 882 F.3d at 1125. For purposes of determining whether claims contain an inventive concept, "[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369 (Fed. Cir. 2018). Here, the specification details the ways in which the Challenged Patents improved upon then-existing technology in an unconventional way, e.g., by using non-specialized equipment. Motorola therefore cannot show that this issue is undisputed.

CONCLUSION

For the foregoing reasons, the Court denies Motorola's motion for partial judgment on the pleadings [33]. Status hearing set for 8/17/23 at 10:20 a.m.

It is so ordered.

Dated: July 18, 2023

Charles P. Kocoras

United States District Judge

Charles P. Kornas